Name _____ Date _____

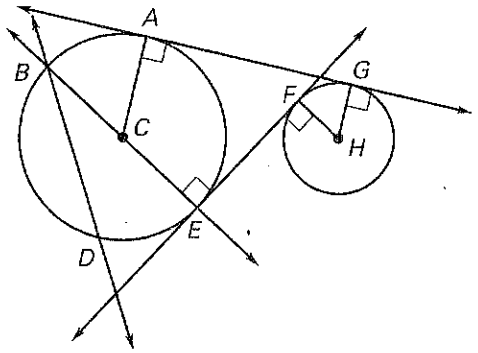
LESSON 10.1

Practice C

For use with pages 650–658

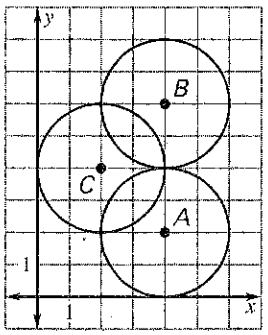
State the best term for the given figure in the diagram.

1. F
2. $\overleftrightarrow{FE}$
3. $\overline{HG}$
4. $\overline{DB}$
5. C
6. $\overline{BE}$
7. $\overleftrightarrow{DB}$
8. $\overleftrightarrow{AG}$



Use the diagram at the right.

9. Find the diameter and radius of $\odot A$, $\odot B$, and $\odot C$.
10. Describe the point of intersection of all three circles.
11. Describe all the common tangents of $\odot A$ and $\odot B$.
12. Describe the common secant of $\odot A$ and $\odot C$ that passes through both intersections of the two circles.



Draw a pair of circles with the characteristics described.

13. non-intersecting circles, no common tangents

14. intersecting circles, 2 common tangents

15. 1 point of intersection, 1 common tangent

16. 1 point of intersection, 3 common tangents

Name _____ Date _____

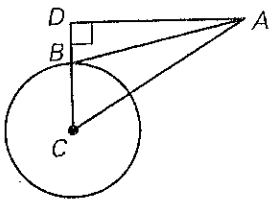
LESSON 10.1

Practice C *continued*

For use with pages 650–658

In the diagram, $\overline{BC}$ is a radius of $\odot C$. Determine whether $\overline{AB}$ is tangent to $\odot C$. *Explain* your reasoning.

17.



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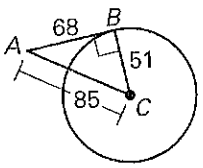

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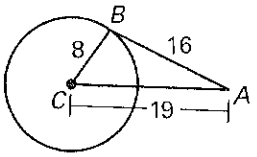
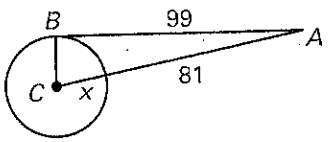


In the diagram, assume that segments are tangents if they appear to be. Find the value(s) of x.

20.



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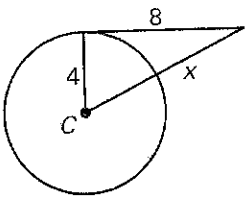

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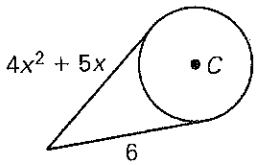

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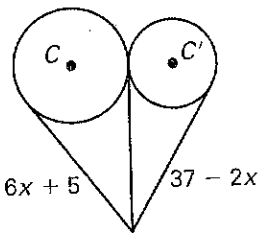

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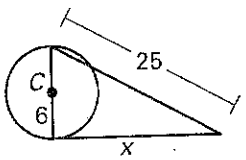
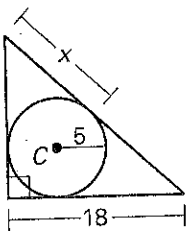
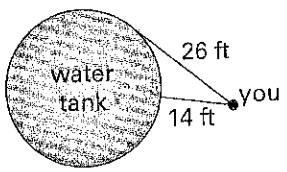


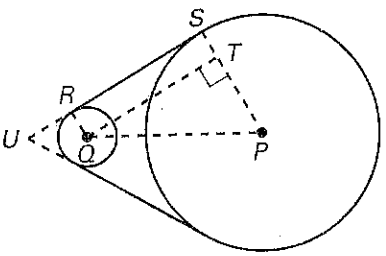
25.



26. Water Tank You are standing 14 feet from the edge of a cylindrical water tank and 26 feet from a point of tangency. The tank is 10 feet tall. What is the volume of the tank in cubic feet?



27. Pulleys The figure shows a pulley system in which a belt is wrapped around two pulleys so that one can drive the other. $\overline{RS}$ is tangent to $\odot Q$ at R and to $\odot P$ at S. $\overline{QT}$ is perpendicular to $\overline{SP}$, and Q and P are the centers of the circles. Let $QR = 2$ in., $PS = 8$ in., and $PQ = 12$ in.



a. Write a paragraph proof to show that $QRST$ is a rectangle.

b. Find RS.

c. Find $m\angle P$.

Name _____ Date _____

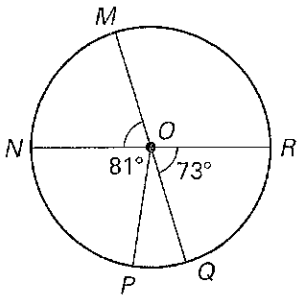
LESSON 10-2

Practice C

For use with pages 659–663

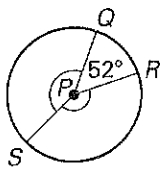
$\overline{MQ}$ and $\overline{NR}$ are diameters of $\odot O$. Determine whether the given arc is a *minor arc*, *major arc*, or *semicircle*. Then find the measure of the arc.

1. $\overset{\frown}{MN}$
2. $\overset{\frown}{NQ}$
3. $\overset{\frown}{NQR}$
4. $\overset{\frown}{MRP}$
5. $\overset{\frown}{PN}$
6. $\overset{\frown}{MNQ}$
7. $\overset{\frown}{QR}$
8. $\overset{\frown}{MR}$
9. $\overset{\frown}{QMR}$
10. $\overset{\frown}{PQ}$
11. $\overset{\frown}{PRN}$
12. $\overset{\frown}{MQN}$

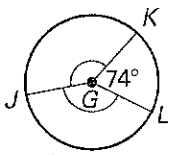


Find the indicated arc measure.

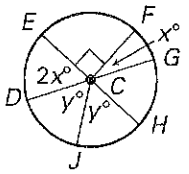
13. $m\overset{\frown}{QS}$



14. $m\overset{\frown}{LKJ}$

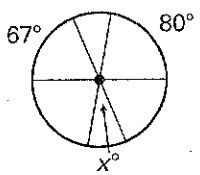


15. $m\overset{\frown}{DH}$

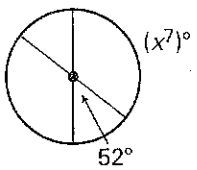


Find the value of *x*.

16.



17.



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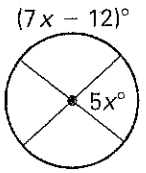


$\overline{AC}$ and $\overline{BD}$ are diameters of $\odot E$. Find the measure of the given arc if $m\overset{\frown}{ACD} = 316°$.

19. $m\overset{\frown}{AD}$
20. $m\overset{\frown}{BC}$
21. $m\overset{\frown}{BCA}$
22. $m\overset{\frown}{DCB}$

$\overline{RT}$ and $\overline{PS}$ are diameters of $\odot N$. Find the measure of the given arc if $m\overset{\frown}{TP} = 47°$.

23. $m\overset{\frown}{ST}$
24. $m\overset{\frown}{PR}$
25. $m\overset{\frown}{RTP}$
26. $m\overset{\frown}{STR}$

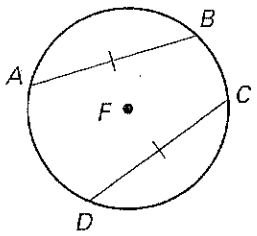
Name _____ Date _____

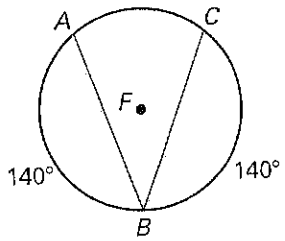
LESSON 10.3

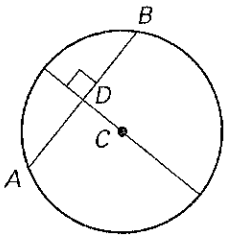
Practice C

For use with pages 664–670

What can you conclude about the diagram? State a postulate or theorem that justifies your answer.

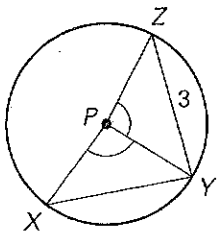
1. 

2. 

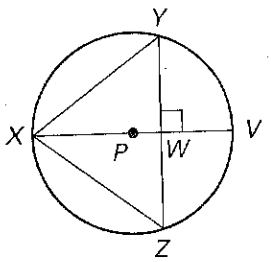
3. 

***P* is the center of the circle. Use the given information to find *XY*.**

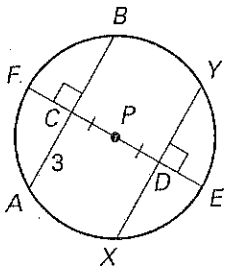
4. $ZY = 3$



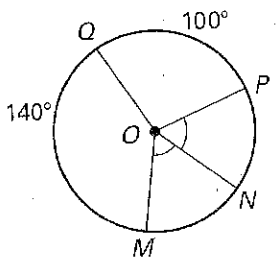
5. $ZY = 6, XW = 4$

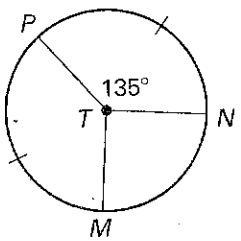


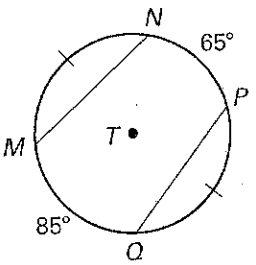
6. $CA = 3$

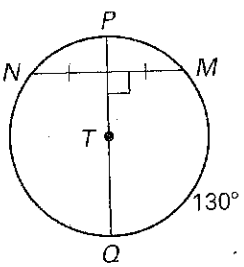


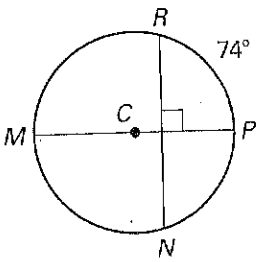
Find the measure of $\overset{\frown}{MN}$.

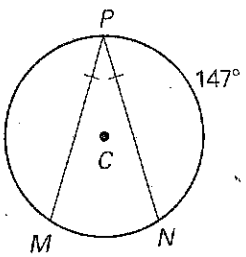
7. 

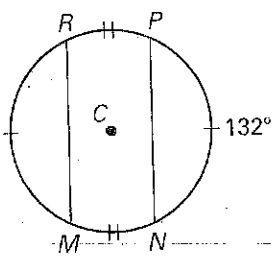
8. 

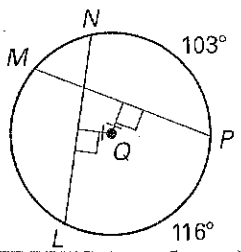
9. 

10. 

11. 

12. 

13. 

14. 

15.